



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**H.222.0**

**Amendment 5**  
(05/99)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Infrastructure of audiovisual services – Transmission  
multiplexing and synchronization

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Information technology – Generic coding of moving  
pictures and associated audio information: Systems

**Amendment 5**

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**AUDIOVISUAL AND MULTIMEDIA SYSTEMS**

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**INTERNATIONAL STANDARD 13818-1**

**ITU-T RECOMMENDATION H.222.0**

**INFORMATION TECHNOLOGY – GENERIC CODING OF MOVING PICTURES  
AND ASSOCIATED AUDIO INFORMATION: SYSTEMS**

**AMENDMENT 5**

### **Summary**

This amendment defines a set of syntax and semantics extensions to cover the recently standardized high quality audio coding ISO/IEC 13818-7 – Advanced Audio Coding (AAC).

### **Source**

The ITU-T Recommendation H.222.0, Amendment 5 was approved on 27 May 1999. The identical text is also published as ISO/IEC International Standard 13818-1, Amendment 5.

## FOREWORD

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The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

## NOTE

In this Recommendation the term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration*, *ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992)*.

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As of the date of approval of this Recommendation, the ITU had received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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## INTERNATIONAL STANDARD

## ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – GENERIC CODING OF MOVING PICTURES  
AND ASSOCIATED AUDIO INFORMATION: SYSTEMS**

**AMENDMENT 5**

**1) Subclause 2.4.3.7**

Replace Table 2-18 with:

**Table 2-18 – Stream\_id assignments**

| stream_id               | Note | Stream coding  |
|-------------------------|------|--|
| 1011 1100               | 1    | program_stream_map   |
| 1011 1101               | 2    | private_stream_1   |
| 1011 1110               |      | padding_stream   |
| 1011 1111               | 3    | private_stream_2   |
| 110x xxxx               |      | ISO/IEC 13818-3 or ISO/IEC 11172-3 or ISO/IEC 13818-7 audio stream number x xxxx |
| 1110 xxxx               |      | ITU-T Rec. H.262   ISO/IEC 13818-2 or ISO/IEC 11172-2 video stream number xxxx   |
| 1111 0000               | 3    | ECM_stream   |
| 1111 0001               | 3    | EMM_stream   |
| 1111 0010               | 5    | ITU-T Rec. H.222.0   ISO/IEC 13818-1 Annex B or ISO/IEC 13818-6_DSMCC_stream     |
| 1111 0011               | 2    | ISO/IEC_13522_stream   |
| 1111 0100               | 6    | ITU-T Rec. H.222.1 type A  |
| 1111 0101               | 6    | ITU-T Rec. H.222.1 type B  |
| 1111 0110               | 6    | ITU-T Rec. H.222.1 type C  |
| 1111 0111               | 6    | ITU-T Rec. H.222.1 type D  |
| 1111 1000               | 6    | ITU-T Rec. H.222.1 type E  |
| 1111 1001               | 7    | ancillary_stream   |
| 1111 1010 ... 1111 1110 |      | Reserved data stream   |
| 1111 1111               | 4    | program_stream_directory   |

The notation x means that the value "0" or "1" are both permitted and results in the same stream type. The stream number is given by the values taken by the x's.

NOTE 1 – PES packets of type program\_stream\_map have unique syntax specified in 2.5.4.1.

NOTE 2 – PES packets of type private\_stream\_1 and ISO/IEC\_13552\_stream follow the same PES packet syntax as those for ITU-T Rec. H.262 | ISO/IEC 13818-2 video and ISO/IEC 13818-3 audio streams.

NOTE 3 – PES packets of type private\_stream\_2, ECM\_stream and EMM\_stream are similar to private\_stream\_1 except no syntax is specified after PES\_packet\_length field.

NOTE 4 – PES packets of type program\_stream\_directory have a unique syntax specified in 2.5.5.

NOTE 5 – PES packets of type DSM-CC\_stream have a unique syntax specified in ISO/IEC 13818- 6.

NOTE 6 – This stream\_id is associated with stream\_type 0x09 in Table 2-29.

NOTE 7 – This stream\_id is only used in PES packets, which carry data from a Program Stream or an ISO/IEC 11172-1 System Stream, in a Transport Stream (refer to 2.4.3.7).

2) **Subclause 2.4.4.9**

Replace Table 2-29 with:

**Table 2-29 – Stream type assignments**

| Value       | Description  |
|-------------|--|
| 0x00        | ITU-T   ISO/IEC reserved   |
| 0x01        | ISO/IEC 11172-2 Video  |
| 0x02        | ITU-T Rec. H.262   ISO/IEC 13818-2 Video or ISO/IEC 11172-2 constrained parameter video stream |
| 0x03        | ISO/IEC 11172-3 Audio  |
| 0x04        | ISO/IEC 13818-3 Audio  |
| 0x05        | ITU-T Rec. H.222.0   ISO/IEC 13818-1 private_sections  |
| 0x06        | ITU-T Rec. H.222.0   ISO/IEC 13818-1 PES packets containing private data                       |
| 0x07        | ISO/IEC 13522 MHEG   |
| 0x08        | Annex A – DSM CC   |
| 0x09        | ITU-T Rec. H.222.1   |
| 0x0A        | ISO/IEC 13818-6 type A   |
| 0x0B        | ISO/IEC 13818-6 type B   |
| 0x0C        | ISO/IEC 13818-6 type C   |
| 0x0D        | ISO/IEC 13818-6 type D   |
| 0x0E        | ISO/IEC 13818-1 auxiliary  |
| 0x0F        | ISO/IEC 13818-7 Audio with ADTS transport syntax   |
| 0x10 - 0x7F | ITU-T Rec. H.222.0   ISO/IEC 13818-1 reserved  |
| 0x80 - 0xFF | User private   |



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